IN THE SPECIFICATION:

Please amend paragraph [0047] as follows:

In one embodiment of the present invention, the emitter layer may be composed of two layers of the first and second emitter layers having lattice constants of a_{e1} and a_{e2} respectively, and the first emitter layer is sandwiched between the second emitter layer and the base layer. In such case, the lattice constant a_{e2} of the second emitter layer is used as the lattice constant a_e in the relationship of $a_c>a_b>a_e$ or $a_c<a_b<a_e$. That is, a_c, a_b and a_{e2} satisfy a relationship of $a_c>a_b>a_{e2}$ or $a_c<a_b<a_{e2}$. The lattice constant a_{e2} of the second emitter layer may be mismatched with the lattice constant a_b of the base layer largely, and a_{e2} and a_b may satisfy a relationship of $|a_{e2}-a_b|/a_b x100>0.3$ (%). On the other hand, the lattice constant a_{e1} of the first emitter layer may be a value near the lattice constant a_b of the base layer, and the lattice mismatch ratio between the first emitter layer and the base layer may be, for example, not greater than 0.1 %. Further, a_{e1} and a_b may be substantially equal to and lattice ~~mismatched~~ <u>matched</u> with each other.

Please amend paragraph [0050] as follows:

In another embodiment of the present invention, the collector layer may be composed of two layers of the first and second collector layers having lattice constants of a_{c1} and a_{c2} respectively, and the first collector layer is sandwiched between the second collector layer and the base layer. In such case, the lattice constant a_{c2} of the second collector layer is used as the lattice constant a_c in the relationship of $a_c>a_b>a_e$ or $a_c<a_b<a_e$. That is, a_{c2}, a_b and a_e satisfy a relationship of $a_{c2}>a_b>a_e$ or $a_{c2}<a_b<a_e$. The lattice constant a_{c2} of the second collector layer may be mismatched with the lattice constant a_b of the base layer largely, and a_{c2} and a_b may satisfy a relationship of $|a_{c2}-a_b|/a_b \times 100>0.3$ (%). On the other hand, the lattice constant a_{c1} of the first collector layer may be a value near the lattice constant a_b of the base layer, and the lattice mismatch ratio between the first collector layer and the base layer may be, for example, not greater than 0.1 %. Further, a_{c1} and a_b may be substantially equal to and lattice ~~mismatched~~ matched with each other. This embodiment will be advantageous when otherwise a band structure of the collector-base will not be formed as desired and thereby change in characteristics of the HBTs will be brought about. According to this embodiment, effects similarly to the above can be obtained by controlling the lattice constant a_{c1} of the first collector layer to form the desired band structure (more

specifically, the desired band gap of the collector base) and by controlling the lattice constant a_{c2} of the second collector layer to strain significantly with respect to the lattice constant a_b of the base layer.

Please amend paragraph [0053] as follows:

The HBT of the present invention may be a III-V or II-VI HBT. The III-V HBT is structured by using material layers containing at least one element selected from the group III such as In, Ga and Al and at least one element selected from the group V such as P, As, Sb and N. For example, the III-V HBT may contain an InGaP/GaAs heterojunction, an InP/InGaAs heterojunction or the like. The II-VI HBT is structured by using material layers containing at least one element selected from the group II such as Zn and at least one element selected from the group ~~V~~ VI such as Se. For example, the II-VI HBT may have a Zn/Se heterojunction or the like.

Please amend paragraph [0077] as follows:

When compared Sample Nos. 1 and 2 with No. 5 and 6 respectively under the condition of the same value of a_e and different values of a_b, Ea of Sample Nos. 1 and 2 of which a_b was closer to ~~a_e~~ a_c were higher than that of Sample Nos. 5 and 6. This would be brought about by the smaller lattice mismatch

ratio of the base layer to the collector layer. Thus, the lattice mismatch ratio of the base layer to the collector layer was preferably not larger than about 0.3% and more preferably not larger than about 0.1%.

Please amend paragraph [0081] as follows:

Next, an HBT containing the $In_yGa_{1-y}P$ layer (y = 0.48) of the line (d) in the place of the $In_yGa_{1-y}P$ layer (y = 0.46) of the line (c) in the HBT of Sample No. 2 will be discussed. In such case, the line (d) located over the line (b) in the temperature range less than 120 °C. Therefore, a_c, a_b and a_e are in $a_c>a_b$ and ~~$a_b>a_e$~~ $\underline{a_b \leq a_e}$ and the relationship of $a_c>a_b>a_e$ was not satisfied in this range. On the contrast, the line (d) located under the line (b) in the temperature range not less than 120 °C, and the relationship of $a_c>a_b>a_e$ was satisfied. Thus, the HBT having the long lifetime and the high reliability was obtained as long as its junction temperature was not less than 120 °C.

Please amend paragraph [0082] as follows:

As described above, the present invention can be conducted so that the relationship of $a_c>a_b>a_e$ is satisfied at least at the junction temperature of the HBT while considering influence

of the temperature to the lattice constant(s). For example, in a case of Heat Resistance R = 60 °C/W, Collector-emitter voltage V_{ce} = 3 V, and Collector current I_c = ~~300 A~~ 300 mA this will result in the junction temperature T_j = about 80 °C, and therefore it is desirable to select the lattice constants a_b, a_e and a_c to satisfy the predetermined relationship at least at this temperature.